

pp2



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/815,683	03/23/2001	Shinichi Yamamoto	28569.9300	5853

7590 08/12/2003

Michael K. Kelly
Snell & Wilmer, LLP
One Arizona Center
400 E. Van Buren Street
Phoenix, AZ 85004-2202

EXAMINER

KASENGE, CHARLES R

ART UNIT	PAPER NUMBER
----------	--------------

2125

DATE MAILED: 08/12/2003

6

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/815,683

Applicant(s)

YAMAMOTO ET AL.

Examiner

Charles R Kasenge

Art Unit

2125

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 14 is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4. 6) ☐ Other: _____

DETAILED ACTION

Allowable Subject Matter

1. Claim 14 is allowed.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 3-8, and 10-13 are rejected under 35 U.S.C. 102(b) as being anticipated by Saito et al. U.S. Patent 6,018,690. Referring to claim 1, Saito discloses a power supply system (col. 2, lines 50-55), comprising: a plurality of electric products (col. 2, lines 50-55); a power generation apparatus capable of varying an amount of power generation (col. 2, lines 56-60); and a power control apparatus for controlling power supply from the power generation apparatus to the plurality of electric products (col. 2, lines 50-55), wherein: each of the plurality of electric products is structured to be capable of outputting a first power request signal for requesting a desired amount of power (col. 5, lines 50-60), the power control apparatus receives the plurality of first power request signals respectively from the plurality of electric products (col. 7, lines 30-41), generates a second power request signal for requesting an amount of power which is determined in accordance with a total amount of power requested by the plurality of first power request signals, and outputs the second power request signal to the power generation apparatus (col. 8, lines 33-58), and the power generation apparatus increases or decreases the amount of

Art Unit: 2125

power generation so as to match the amount of power generation with a target amount of power generation which is determined in accordance with the second power request signal (col. 7, lines 30-41 and col. 9, lines 38-50).

Referring to claim 3, Saito discloses a power supply system according to claim 1, wherein the power control apparatus generates the second power request signal so as to fulfill $R = \sum R_i + R_m$, where R indicates an amount of power requested by the second power request signal, R_i ($i=0, 1, \dots, n$) indicates an amount of power requested by each of the plurality of first power request signals, and R_m indicates a minimum necessary amount of power for communication between the plurality of electric products and the power control apparatus (col. 14, lines 1-14). The Office interprets the minimum necessary amount of power as inherent to calculating the total power consumption.

Referring to claim 4, Saito discloses a power supply system according to claim 1, wherein: the power generation apparatus determines whether or not the amount of power generation matches the target amount of power generation which is determined in accordance with the second power request signal (col. 9, lines 38-50); and when the amount of power generation is determined to match the target amount of power generation, the power generation apparatus outputs a matching signal to the power control apparatus, and the power control apparatus outputs an acknowledging signal to each of at least one electric product which outputs the first power request signal among the plurality of electric products, in response to the matching signal (col. 21, lines 33-45).

Referring to claim 5, Saito discloses a power supply system according to claim 1, wherein: the power generation apparatus determines whether or not the amount of power

Art Unit: 2125

generation matches the target amount of power generation which is determined in accordance with the second power request signal (col. 17, lines 1-15); and when the amount of power generation is determined to match the target amount of power generation, the power generation apparatus outputs an acknowledging signal to each of at least one electric product which outputs the first power request signal among the plurality of electric products (col. 17, lines 15-31).

Referring to claim 6, Saito discloses a power supply system according to claim 1, further comprising a power supply apparatus for outputting at least one of power supplied from the power generation apparatus and power supplied from a power supply source other than the power generation apparatus, wherein the power generation apparatus determines whether or not the amount of power generation matches the target amount of power generation which is determined in accordance with the second power request signal; and when the amount of power generation is determined to match the target amount of power generation, the power generation apparatus outputs a matching signal to the power control apparatus, and the power control apparatus determines whether or not an amount of power requested by a current second power request signal is increased as compared with an amount of power requested by a previous second power request signal; and when it is determined that the amount of power requested by the current second power request signal is increased as compared with the amount of power requested by the previous second power request signal, the power control apparatus controls the power supply apparatus to compensate for an insufficiency in the power supplied from the power generation apparatus with power supplied from the power supply source, during a period from when the current second power request signal is output to the power generation apparatus until when the matching signal is received from the power generation apparatus (col. 17, lines 1-31).

Art Unit: 2125

Referring to claims 7 and 8, Saito discloses a power supply system according to claim 6, wherein the power control apparatus controls the power supply apparatus to compensate for the insufficiency in the power supplied from the power generation apparatus with power supplied from the power supply source only when the increase of the amount of power requested by the current second power request signal over the amount of power requested by the previous second power request signal is equal to or more than a prescribed value (col. 17 and 18, lines 57-67 and 1-7). Saito discloses the power supply system according to claim 6, wherein the power supply source supplies commercial power (col. 5, lines 50-52).

Referring to claims 10 and 11, Saito discloses a power supply system according to claim 1, wherein the plurality of electric products are connected to the power control apparatus via a wireless system or a wired system (col. 11, lines 32-43). Saito discloses a power supply system according to claim 1, wherein the first power request signal is a state signal indicating a state of the electric product; and the power control apparatus obtains an amount or power required by the electric product in the state which is indicated by the state signal, and generates the second power request signal based on the amount of power required by the electric product (col. 6, lines 46-49).

Referring to claim 12, Saito discloses a computer system comprising a server computer and a terminal, wherein: the server computer includes a storage section for storing a correspondence table indicating a relationship between a state of an electric product and power consumption of the electric product in the state (col. 21 and 22, lines 53-67 and 1-4), and the correspondence table is downloaded from the server computer through a network in accordance with a request from the terminal (col. 21, lines 51-52 and Fig. 26).

Art Unit: 2125

Referring to claim 13, Saito discloses a computer system according to claim 12, wherein: the terminal is connected to a power supply system, the power supply system includes a plurality of electric products, a power generation apparatus capable of varying an amount of power generation, and a power control apparatus for controlling power supply from the power generation apparatus to the plurality of electric products, and the downloaded correspondence table is stored in the power control apparatus (col. 25, lines 49-53 and Fig. 23).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 2 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Saito et al. as applied to claims 1 and 6 above, and further in view of Wills U.S. Patent 6,219,623. Saito does not expressly disclose the use of a fuel cell or a storage cell for power generation. Wills discloses a power supply system wherein the power generation apparatus is a fuel cell and a power supply source wherein the power supply source is a storage cell (col. 1, lines 37-45).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art it to use a fuel cell and a battery for Saito's power supply control system. One of ordinary skill in the art would have been motivated to do this since they are independent power sources and can generate power that can be sold (col. 1, lines 37-45).

Art Unit: 2125

Conclusion

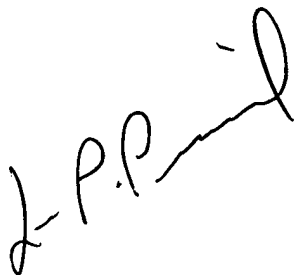
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles R Kasenge whose telephone number is 703 305-8592.

The examiner can normally be reached on Monday through Friday, 8:30 - 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Leo Picard can be reached on 703 308-0538. The fax phone numbers for the organization where this application or proceeding is assigned are 703 746-7239 for regular communications and 703 746-7239 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703 308-0538.

CK
August 1, 2003

A handwritten signature in black ink, appearing to read 'L. Picard', written diagonally across the page.

LEO PICARD
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100